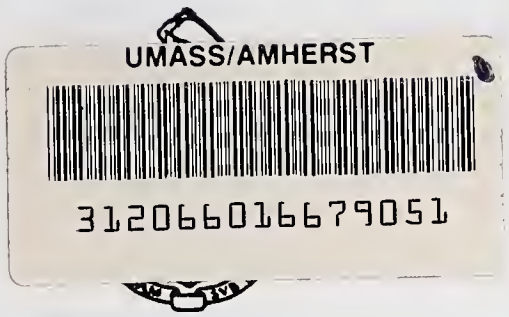

How the New 21E Program Is Measuring Up

Commonwealth of Massachusetts
Department of Environmental Protection

What the Stakeholders are Saying...

How Members of the Waste Site Cleanup Program Advisory Committee Think the New Program is Measuring Up

The redesigned Superfund program is a big improvement: it provides responsible parties with several cleanup options; allows them to exit the cleanup process more quickly; and eases the workload on DEP. "Program privatization" gives the private sector more certainty and flexibility while remaining highly protective of the environment. We look forward to further improvements in the program.

Steven S. Guveyan, Associate Director
Massachusetts Petroleum Council

The public is very supportive of the expedited and privatized program because ultimately we expect more cleanups to take place at a faster pace and with less cost. However, for the program to work as intended we believe it is imperative that LSPs take their public responsibilities seriously and hold paramount the protection of public health and the environment. It is also important to promote public scrutiny of the performance of LSPs through publication of the results of audits and involvement of site neighbors when property restrictions are implemented as part of cleanups.

Gretchen P. Latowsky
JSI/Center for Environmental Health Studies

DEP has made significant progress in both creating a viable, privatized system, and continuing to make changes as our experience and knowledge develops The next important step is to educate the "marketplace" — for example, purchasers of property and lenders — that these changes provide acceptable, sound options which can be incorporated into a business or property transaction.

Lauren Stiller Rikleen
Bowditch & Dewey

Our clients who are conducting response actions truly appreciate the creation of new exit ramps from the MCP highway and the availability of the Licensed Site Professional who can guide them. As a consultant who has worked in the Federal Superfund process, I appreciate the craftsmanship of the MCP in basing decisions on the risk posed by a site rather than on a single inflexible numerical standard.

T.J. Stevenson, President
Ambient Engineering

Continues on inside back cover

COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
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Lt. Governor

TRUDY COXE
Secretary

DAVID B. STRUHS
Commissioner

January 1996

Dear Stakeholder:

In 1990, a public/private study committee — born out of frustration with the backlogs and uncertainties that were then trademarks of the Massachusetts waste site cleanup program — began charting a new course. The Committee envisioned a new 21E program that would give the private sector more flexibility to complete cleanups and allow the Department of Environmental Protection to focus limited resources where they were needed most.

That vision became a reality with the start-up of the revamped waste site cleanup program on October 1, 1993. The innovative program outlined in the amended Massachusetts General Law Chapter 21E and the revised Massachusetts Contingency Plan (MCP) recently marked its second anniversary. DEP is now pleased to present this progress report, which documents some very encouraging results: more cleanups are being completed at a faster pace than ever before.

In the first two years of the new program, there were more than 3,200 permanent cleanups — some 700 of them at sites that had languished under the old rules with no clear way out of the cleanup process. Although the experience we have gained and the data we have collected are still preliminary, they show promise for continued success. The job is not finished. We need to build on our experience and further streamline the process so that the bottom line of environmental protection is more easily achieved.

The overhaul of the 21E program has been a collaborative effort from the beginning, and I want to offer my personal thanks to DEP staff and our partners in the business and environmental communities for their hard work, dedication, and enthusiasm in making the waste site cleanup process more efficient and effective in Massachusetts.

Sincerely,

James C. Colman

James C. Colman
Assistant Commissioner for Waste Site Cleanup

Historical Perspective

In the late 1960s, Massachusetts launched a limited program for responding to oil spills that threatened bodies of water. The Commonwealth established broader authority and additional resources to more aggressively target contaminated sites and spill emergencies when Chapter 21E of the General Laws — the state Superfund statute — was enacted in 1983.

Chapter 21E gave the Department of Environmental Protection (DEP) the task of ensuring permanent cleanup of oil and hazardous material releases, determining who is legally responsible for them, and requiring those parties to do the work or reimburse the Commonwealth for cleanup costs.

In 1986, Massachusetts voters overwhelmingly approved a binding ballot question that gave DEP specific deadlines and quotas for finding and assessing hazardous waste sites, ensuring their timely cleanup, and expanding public participation in the process. But these new requirements led to bureaucratic and environmental gridlock. The program was predicated on direct DEP oversight of assessment and cleanup work — something the agency was never given the necessary funding to provide.

By 1990, the number of known and suspected sites across the Commonwealth far outstripped DEP's ability to oversee responses at all of them. Fewer than one-quarter of the hazardous waste sites in Massachusetts were being worked on actively and only a handful of cleanups were being completed in any given year. Everyone with an interest in the program agreed that a new approach was needed.

So, DEP formed a public/private 21E Study Committee to determine what government and the private sector each did best and to develop a new vision — one ultimately shared by all major stakeholders — for accelerating cleanups without compromising environmental standards. New legislation in 1992 and revised Massachusetts Contingency Plan (MCP) regulations in 1993 expanded the private sector's role for most sites, focusing limited government resources on the worst sites and on those tasks that government needed to perform.

The New Approach

A cornerstone of the new program was the creation of Licensed Site Professionals (LSPs) — environmental experts licensed by an independent Board of Registration who have a minimum level of competence in site assessment and cleanup. Just as

Different Route, Same Destination

When DEP, the private sector, and public interest/environmental advocates agreed to work together on the 21E redesign, they decided that regardless of its ultimate shape, the new program would have to be predicated on five long-standing principles:

- DEP needs to know about releases of oil and hazardous material to the environment.
- Sites should be permanently cleaned up in a timely manner.
- It is DEP's job to ensure that assessment and cleanup are done properly.
- Those legally responsible should pay their fair share of cleanup costs.
- Citizens should be informed of, and involved in, cleanup decision-making.

people hire attorneys to give them legal advice or accountants to prepare their tax returns, people conducting response actions hire LSPs to manage cleanups and provide opinions that site work meets state requirements — in most cases without DEP involvement. The agency audits the results at approximately 20 percent of these sites annually to ensure adherence to state cleanup standards.

Sites not permanently cleaned up within one year are scored using the MCP's Numerical Ranking System and classified as Tier I or Tier II to determine the subsequent level of DEP oversight. Tier II sites may proceed with cleanup without DEP involvement. Tier I sites require a permit to proceed, and the most complicated of these, Tier IA, require direct agency oversight.

The new program employs performance standards rather than traditional "command and control" techniques to obtain desired results without micro-management by DEP.

Private parties benefit from clear rules, and from a process that leaves the pace up to them and gives them more flexibility to tailor cleanups. New incentives for quickly reducing risks and achieving permanent solutions also give them opportunities to lower cleanup costs. Citizens benefit from the increased pace of cleanup because the duration of their potential exposure to contamination is reduced. The Commonwealth benefits because the new program is more efficient, enabling DEP staff to focus on those sites that pose the most serious risks to public health and the environment.

Site Scorecard

In the first two years of the program, the private sector ranked 803 sites using DEP's Numerical Ranking System, with these results:

Tier II.....710 (88.4 percent)

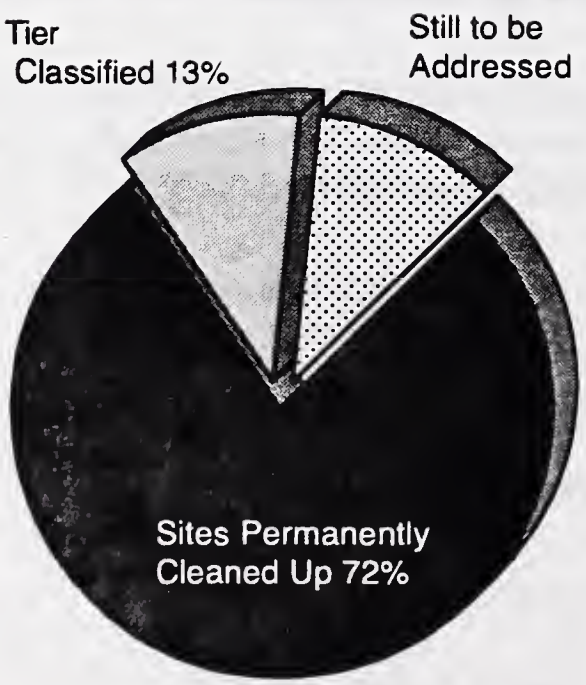
Tier IC.....77 (9.6 percent)

Tier IB.....15 (1.9 percent)

Tier IA.....1 (0.1 percent)

DEP had originally estimated that about 70 percent of the sites requiring classification would score as Tier II.

Status of Releases One Year After Reporting*



releases reported 10/1/93 - 10/1/94

Clear Notification Thresholds

The original MCP included criteria for reporting sudden releases of oil and hazardous materials, but provided no guidance on reporting "historical" contamination. Uncertain about what DEP would consider significant but wanting to comply with the law, private parties would report even tiny trace amounts. As a result, there was exponential growth in the backlog of reported sites waiting to receive a clean bill of health from DEP.

Revisions to the MCP ended the uncertainty by establishing Reportable Concentrations (RCs) — clear thresholds for determining contaminant levels in soil and groundwater that could pose significant risks and therefore should be reported to DEP. Even if an

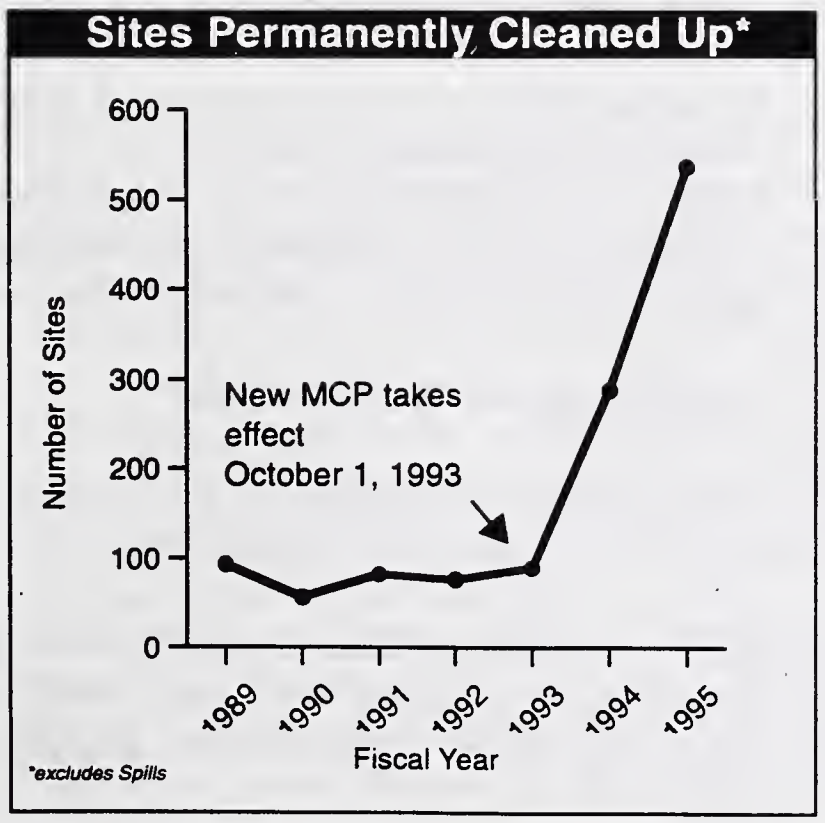
Honored for Innovation

DEP's first-in-the-nation program to privatize the cleanup of hazardous waste sites won national recognition from the Council of State Governments, which selected it as one of its 1995 Innovations Award winners. The program was one of eight award-winners nationwide, two in each of four regions. The Innovations Award Program identifies and recognizes the best and most creative practices in state government which have the potential to be adopted by other states.

RC is exceeded, a "Limited Removal Action" (i.e. the removal of up to 100 cubic yards of petroleum contaminated soil or up to 20 cubic yards of soil contaminated with hazardous material) can keep a site out of the system entirely. With clearer and more sensible notification criteria, insignificant releases no longer need to be reported.

Accelerated Risk Reduction

Preventing waste sites is the best way to avoid the costs and dangers they pose. But even after a release of oil or hazardous material has occurred, acting quickly can reduce exposures to contamination and prevent problems from getting worse. The new MCP provides opportunities and incentives for private parties to reduce risks early. Risk reduction measures can lead to permanent cleanups of smaller releases (documented in a Response Action Outcome Statement or "RAO"), improve conditions when longer-term cleanups will be necessary, and lower a site's ultimate Tier classification.



Immediate Response Actions (IRAs) must be taken, subject to DEP approval, whenever a sudden release or other time-critical situation is encountered. Other early actions, known as Release Abatement Measures (RAMs) and Utility-related Abatement Measures (URAMs), can be voluntarily taken to reduce risks and lower future cleanup costs. Compared with the old program, there has been a 400 percent increase in voluntary risk reduction measures under the new rules.

Certainty and Flexibility

In the new 21E program, the private sector has more flexibility to accelerate the assessment and cleanup of hazardous waste sites and spills in Massachusetts without compromising the state's environmental standards. At the same time, there are now clear endpoints to the cleanup process — something the original program failed to provide.

The revised MCP establishes performance standards for all cleanups, but relies on LSPs to use their professional judgment in determining how best to meet those standards. The specifics of assessment and cleanup are left up to them. This allows LSPs to tailor response actions to specific site conditions, which can ultimately save private parties both time and money.

Determining "how clean is clean enough" is probably the area in which certainty is desired most, since

Risk Reduction Measures

	Number Initiated	*Resulting in Permanent Cleanups**
Immediate Response Actions	3,664	2,041
Release Abatement Measures	620	187
Utility-related Abatement Measures	47	1
Total	**4,337**	**2,229**

**as of 10/1/95; this number may increase as ongoing risk reduction measures are completed.*

private parties do not want to begin a process from which there is no clear way out. The MCP contains numerical cleanup standards for the contaminants most commonly found in soil and groundwater. At their option, private parties and their LSPs may use these established cleanup levels to decide when a site achieves a condition of "no significant risk". Since site-specific risk characterizations are not needed, considerable time and money can be saved. To date, approximately 92 percent of all cleanups have employed this simpler, more certain method for achieving an end result. In the other cases, private parties chose to employ a site-specific risk assessment, which is an option at all sites.

The new MCP also expands cleanup options by allowing the planned use of a site to be taken into account. Sites no longer have to be restored to pristine conditions when there are either no routes of exposure (e.g., the contamination lies beneath pavement or a building) or the site is intended for commercial or industrial use, provided exposure to any contamination remaining is limited.

Tailoring response actions to reasonably likely future site uses can lead to quicker and less costly cleanups that achieve the level of protection for public health and the environment required by Chapter 21E. When tailored soil cleanup standards are used, Activity and Use Limitations (AULs) — either deed notices or deed restrictions — must be recorded to document the existence of residual contamination and describe activities that can and cannot occur safely so that precautions can be taken should site uses change in the future. In the first two years, private parties filed 133 AULs to achieve protective and site-appropriate cleanups.

The lack of clear endpoints in the old rules meant that many sites were "closed out" with little documentation. The new MCP provides that Response Action Outcome Statements (RAOs) be used to document temporary and permanent cleanups. Once an LSP determines that a condition of "no significant risk" exists or has been achieved (or that all substantial hazards have been eliminated for a temporary solution), an RAO is filed with DEP. LSPs signed off on more than 3,200 RAOs in the first two years of the new 21E program (one-fifth of them for sites that had languished for years under the old rules). Twenty-eight of these were for temporary solutions. RAOs do not require DEP approval and generally clear the way for real estate transactions to be completed.

THE COMMONWEALTH'S FOCUS

By getting largely out of the business of directly overseeing most cleanups, DEP has been able to focus staff resources from pre-cleanup approvals to emergency response, cleanup of the worst sites, compliance monitoring, enforcement and site discovery.

Targeting the Worst Sites

When the new 21E program took effect two years ago, 537 sites classified as "priority" sites under the old rules defaulted to Tier IA status under the new MCP. By issuing lower-category Transition Permits and allowing private parties to voluntarily score their sites for a lower tier category, DEP cleared 214 of

Giving "Innocent" Neighbors a Break

DEP recognizes that owners of property affected by contamination coming through the groundwater from upgradient sources may be unable to meet assessment and cleanup requirements because they do not control the contamination source. The "Downgradient Property Status" provision of the MCP has made it possible for these parties to document that contamination on their property originated elsewhere. With this information in hand, DEP can suspend cleanup deadlines and fee assessments — allowing time for the investigation, assessment and resolution of upgradient contamination problems. In the first two years, 24 properties across Massachusetts obtained Downgradient Property Status.

these sites to proceed without its direct involvement, allowing the agency to concentrate on cleanups at the remaining high-risk sites. An additional 27 Tier IA sites were able to achieve an RAO using the new program.

DEP spends considerable time responding to spills, chemical fires and other environmental emergencies. During the first two years of the new program, the agency responded to more than 3,600 spills and other time-critical conditions that required immediate action, helping private parties and their LSPs eliminate dangers and stabilize site conditions. DEP mobilized state contractors in 101 instances, ensuring continuity of assessment and cleanup until private parties accepted responsibility.

State-Funded Cleanups

DEP is now freer to initiate actions at high-risk sites where private parties are unable or unwilling to act themselves. The agency uses every available tool to ensure that state assessment and cleanup costs are recovered. During the first two years, DEP used state bond funds to either partially or fully pay for response actions at 236 sites and spills. During the same period, the agency recovered $7.3 million in assessment and cleanup costs from private parties.

The threat of state cleanup action has historically been a powerful incentive for private parties to undertake response actions. Since 1983, when 21E bond funds became available to DEP, private parties have assumed responsibility for the assessment and cleanup of 97 percent of all spills and other chemical emergencies, and 95 percent of site cleanups where longer-term action has been necessary.

21E bond funds also help DEP leverage the resources of the federal Superfund program, which currently requires states to contribute ten percent of the cleanup construction costs and to bear all operation and maintenance expenses at sites on the National Priorities List (NPL). There are currently 30 NPL "Superfund" sites in Massachusetts, ten of which are receiving state funding.

Ensuring Proper Cleanups

The new rules have dramatically changed the way in which government ensures that public health and the environment are protected. The new 21E program relies heavily on the expertise, initiative and resources of the private sector to get more cleanups done. At the same time, there are a number of built-in safeguards:

- **Licensing.** LSPs bear responsibility for ensuring that the cleanups they manage are sufficient to meet state standards. Those who violate the profession's code of conduct risk disciplinary action by the licensing board.

- **Approvals for early risk reduction.** Emergency responses and most remedial actions taken early in the process are subject to DEP approval

— providing added protection when little may be known about the potential dangers of a site or spill.

- **Tier Classification.** Using the MCP's Numerical Ranking System (NRS), sites not cleaned up within one year of discovery are scored based on the existing and potential risks they pose to public health, water resources, plants and animals, and classified as either Tier I or Tier II. This classification determines the level of DEP oversight appropriate for the site.

- **Permitting.** At high-risk (Tier I) sites, a DEP permit is required before comprehensive cleanup can begin. At the most complicated of these (Tier IA), the agency continuously oversees all response actions taken.

- **Compliance and enforcement.** DEP promotes compliance through education and outreach. The agency conducts both targeted and random audits to ensure that private sector response actions meet the MCP's requirements. Violators are subject to enforcement actions, ranging from warnings to financial penalties.

Site Discovery

Chapter 21E requires property owners and other responsible parties to notify DEP of contamination they find, but does not obligate them to look for it. Many site investigations are performed as a condition of refinancing or of obtaining new financing for a real estate transaction. Otherwise, most property owners feel they have no reason to perform environmental testing.

Because the sites that are reported to DEP may not necessarily be the most serious, the agency proactively looks for contamination in areas where it could cause great harm (e.g. near public water supplies, or in densely populated urban communities that are surrounded by industry).

The success of DEP's ongoing site discovery program depends on partnerships with citizens, municipal officials and public water suppliers, who are

The Licensed Site Professional (LSP) Program

DEP may audit the work done by LSPs, but the agency does not regulate their profession. The Board of Registration of Hazardous Waste Site Cleanup Professionals, more commonly known as the LSP Board, was established to independently license professionals who are qualified to conduct assessment and cleanup work. As of October 1, 1995, the LSP Board had approved 468 applications and denied 221.

The Board — comprised of representatives from industry, the public, environmental groups, DEP, and LSPs themselves — has established Education and Professional Conduct committees, and held its first LSP exam in November 1995.

While employed by the private sector, LSPs must meet specific standards for technical competence, decision-making experience, and ethical practice. The opinions LSPs issue are assumed correct unless or until DEP audits prove otherwise.

A professional organization, the Licensed Site Professional Association, has been established to further develop the profession. DEP works jointly with the LSP Association to offer accredited training courses to LSPs.

Compliance and Enforcement

To **promote compliance** in the first two years, DEP has:

- Launched an MCP Hotline, answering more than 11,000 calls and providing assistance to LSPs, site owners and other callers;
- Run 20 seminars to keep the private sector current on 21E program revisions and three regulatory training courses accredited by the LSP Board to meet the continuing education requirement for LSPs;
- Publicized audit findings and discussed them with the LSP Association to increase awareness of common deficiencies and violations;
- Contributed a regular column to the LSP Association's monthly newsletter, highlighting important audit findings and compliance issues; and
- Regularly sent "reminder" letters to parties conducting response actions about deadlines they have to meet.

To **monitor compliance**, DEP has audited response actions at 335 sites — 194 of them being cleaned up under the new rules. At 92 percent of the randomly-selected sites, work was adequate or problems were easily corrected without further field work. Not surprisingly, the compliance rate was lower (81 percent) at sites DEP specifically targeted because it anticipated that problems might be found. Where serious problems were discovered, auditors found conditions that, if left uncorrected, could result in significant risks to public health and the environment. Among them:

Audits in the New Program

Number of Audits	Compliance Rate*
39 random audits	92%
155 targeted audits	81%
194 total	84%

**work was adequate or corrected without further field work*

- Residual contamination that exceeded MCP cleanup standards;
- Potential source areas — such as floor drains and underground storage tanks — not identified and/or properly investigated;
- Sensitive receptors — including nearby water supplies and residential areas — not identified; and
- Reportable Concentrations erroneously used as cleanup numbers.

In the most severe cases, DEP has asked the LSP Board to consider disciplinary action. Already, the audit program has improved compliance and pushed the level of professionalism higher within the LSP community.

DEP has reserved its strongest **enforcement** actions for those who have failed to notify the agency of oil and hazardous material releases or to obtain needed response action approvals. Seven violators have been assessed penalties totalling more than $60,000. DEP also has issued notices of noncompliance (NONs) — or warnings — to 553 private parties for failing to notify the agency of releases, meet regulatory deadlines, or properly transition sites classified under the old rules as "priority" into the new program. Finally, through the Attorney General's Office, the Commonwealth has collected $265,000 in fines from parties failing to assess and clean up spills or sites for which they are responsible.

more familiar with the local landscape and in a better position to know of past activities that may have resulted in releases of oil or hazardous materials.

SUCCESS TODAY, CHALLENGES TOMORROW

While the new 21E program is still in its infancy, a review of the progress made to date confirms that the five principles upon which it was built were a sound premise for change:

- Releases of oil and hazardous material that could pose significant risks are being reported to DEP and the agency is implementing an aggressive site discovery program focused on sensitive human populations and vulnerable natural resources;

- Permanent cleanups that meet state standards are being completed faster because the private sector has more flexibility and can proceed in most cases without direct DEP involvement;

- DEP has refocused its efforts, devoting most of its resources to emergency response, site discovery, oversight of cleanups at the worst sites, publicly funded sites, and auditing of private sector response actions to ensure they are adequate and that the program is working overall;

Site Discovery: Four Pilot Programs

- After volatile organic compounds (VOCs) were discovered in the Johnson and Pine Street Wellfield in Peabody, DEP used "driven wellpoint" technology to narrow its search for the source to a one-half mile stretch of U.S. Route 1, upgradient of the wellfield. Further groundwater studies are expected to pinpoint the culprit. This pilot also turned up four separate gasoline releases and a number of unregulated floor drains. Six notices of noncompliance requiring floor drain closures have been issued.

- In Southeastern Massachusetts, a region with particularly sensitive aquifers, DEP held a series of workshops with local and state officials to share information about potential sources of contamination. Twenty-seven public water suppliers in 25 communities are now taking steps to catalogue all possible threats to local water supplies. DEP will select the most sensitive areas for field investigations. This pilot is not only identifying potential threats, but has spurred awareness and the establishment of new partnerships for addressing environmental contamination problems.

- Templeton's Otter River well supplies drinking water for 60 percent of the community's population but is threatened by VOCs in the groundwater. In response, DEP initiated a pilot which delineated the extent of contamination, helping the town to assess the potential risks and construct a wellhead treatment plant to eliminate exposures to the population served by the well. Work is ongoing to ensure that other appropriate response actions are taken.

- The Hendrick Street wellfield in Easthampton is contaminated with VOCs. Because there are few commercial or industrial facilities near the well, DEP's pilot encompassed ten square miles and included extensive groundwater sampling. Six possible contamination sources were identified, which have since been narrowed to four. Installation of deep monitoring wells is the next step toward pinpointing the source of contamination.

- Most cleanups are being paid for by private parties, who also pay the permit and compliance fees that help cover DEP's operational costs ($1.6 million was collected in the first two years); and

- Citizens have greater opportunities to be informed about and involved in cleanup decisions — and, in some cases, are being given Technical Assistance Grants that make their involvement more effective — even at sites where DEP is no longer directly overseeing response actions.

Despite this good news, there remain some challenges and improvements to be made, including:

- **Continue education and outreach.** While the new 21E program is a more common-sense approach to waste site assessment and cleanup, the revised MCP is nonetheless a larger and more complex set of regulations. DEP, the private sector and the public are still learning about their evolving roles. The agency already has provided countless hours of training for its own staff and has presented more than 20 DEP-sponsored briefings and seminars attended by nearly 3,000 LSPs, consultants, attorneys and others with an interest in the 21E program and has participated in dozens of seminars sponsored by the private sector. DEP plans to continue these aggressive education and outreach efforts.

- **Keep things as simple as possible.** DEP recognizes that continuing efforts made to improve the new 21E program can actually lead to additional pages of regulations and guidance. But if private parties must continually relearn the rules, DEP's environmental and public health goals will be less attainable. For that reason, the agency is working to ensure that future changes not only enhance effectiveness but eliminate unnecessary complexity.

- **Create incentives for "brownfields" cleanup and redevelopment.** Reclaiming older industrial and commercial properties is one key to the revitalization of urban areas across Massachusetts. Redevelopment removes the blight of

Giving Citizens a Say

Successful cleanups depend in large measure on informed and involved citizens, business leaders, environmentalists and elected officials. For that reason, public involvement planning has been an integral part of the 21E Program since 1986. Under the 1993 revisions, private parties assumed most of the public involvement obligations DEP was required to meet when it directly oversaw site cleanups.

There currently are 119 Public Involvement Plan (PIP) sites in Massachusetts where citizens have requested a greater role in cleanup decision-making. Private parties have taken the lead in PIP implementation at 106 of these sites. There also are two sites where citizens have requested greater involvement in planning preliminary response actions.

DEP provides Technical Assistance Grants (TAGs) of up to $10,000 to citizen groups, municipalities and public water authorities affected by hazardous waste sites. The money may be used to hire experts who can provide advice and technical assistance, or promote better public understanding of assessment, risk minimization and cleanup activities. DEP has awarded a total of $161,000 in TAGs to 17 citizen groups and municipalities.

Testing a New Approach

DEP recently won a $900,000 grant from the U.S. Environmental Protection Agency (EPA) to carry out an 18-month pilot aimed at better integrating state and federal site assessment programs. The pilot project will demonstrate in specific geographic areas a significant and measurable increase in early risk reduction actions and enforcement measures that lead to faster cleanups. This approach builds upon DEP efforts to focus resources where they are needed most. In time, it may be a model for EPA and other states to replicate.

abandoned property from our cities and brings them new jobs and tax revenues. But when contamination is present, the barriers to economic development can be significant. Uncertainties about cleanup costs and future liability, as well as difficulties in obtaining financing, make potential developers wary. DEP is working with sister environmental agencies and state economic development officials to develop new tools, ranging from cleanup loans to liability relief, to spur investments in the redevelopment of brownfields.

- **More clearly identify groundwater resources that are not likely to be used for new drinking water supplies in the future.** Many communities have heavily urbanized areas which lie over aquifers. In these areas, land uses effectively preclude the groundwater's use as a drinking water supply. Therefore, DEP is developing criteria to identify areas that should not be considered potential drinking water source areas. Cleanups in these areas will not need to meet drinking water standards, lowering cleanup costs while still providing the level of protection mandated by Chapter 21E.

Conclusion

DEP wants to ensure that the new 21E program — the first of its kind in the nation — is working as it was intended and providing measurable benefits to public health, the environment and the Massachusetts economy. The agency is striving for continuous improvements that are responsive to emerging issues, scientific advances, and innovative solutions to waste site assessment and cleanup problems.

If you have comments, or want further information on the Massachusetts Waste Site Cleanup Program, please contact the DEP's Bureau of Waste Site Cleanup by calling the MCP Hotline (be sure to press "2" when given menu options): (617) 338-2255 from the Boston area and outside of Massachusetts, or 1-800-462-0444 from area codes 413 and 508.

What the Stakeholders are Saying...

How Members of the Waste Site Cleanup Program Advisory Committee
Think the New Program is Measuring Up

We have made an encouraging start, including reliance on LSPs, new incentives and tools for early risk reduction and cleanup, and numerical cleanup standards which allow certainty regarding cleanup levels. However, I am concerned about the complexity and detail of the MCP, and also that not enough sites will be given relief — even under proposed reforms — from the requirement to clean up to state drinking water standards in areas unlikely to be used for drinking water supplies.

Christopher P. Davis
Goodwin, Procter & Hoar

The new MCP provides potentially responsible parties with a great deal of flexibility in conducting response actions at their sites. Unfortunately, the price of this flexibility has been increased regulatory complexity. Our challenge going forward is to eliminate the program's over-complexity while retaining its clear benefits with respect to the rates of site progress and the conservation of DEP's limited resources.

Larry Feldman
GZA GeoEnvironmental, Inc.

The redesigned MCP makes redevelopment of contaminated properties feasible by providing a rational and flexible cleanup framework that can be accepted by most stakeholders. In this respect, it has accomplished a key goal. The next stage of program development must clarify, simplify, and standardize DEP audit findings to give better and more timely direction to LSPs regarding DEP expectations for site characterization and cleanup. This step will greatly increase the level of certainty for all MCP participants and enhance the long-term effectiveness of the program.

Nancy C. Roberts, Rizzo Associates, Inc.
Vice President, LSP Association